WHAT IS CLAIMED IS:

1. An electric steering column apparatus comprising:

a steering shaft with a steering wheel mounted at the rear end thereof;

a steering column for rotatably supporting said steering shaft;

an electric actuator for adjusting the position of said steering shaft by driving said steering column; and

position detection means for detecting the position of said steering shaft in a non contact manner.

2. An electric steering column apparatus according to claim 1, characterized in that:

said electric actuator has an electric motor held by the main body of the actuator and a rod drive mechanism; and

said rod drive mechanism has a gear shaft comprised of a driven gear portion to be driven by a driving gear on the electric motor side and a shaft portion to be rotatably held by said actuator main body.

3. An electric steering column apparatus comprising:

a steering shaft with a steering wheel mounted at the rear end thereof;

a steering column capable of rotatably holding said steering shaft and also capable of tilt movement around a tilt pivot and telescopic movement along the axial

direction of said steering shaft;

an electric tilt actuator used for the tilt movement of said steering column; and

an electric telescopic actuator used for the telescopic movement of said steering column,

said electric tilt actuator and said electric telescopic actuator having one and the same structure.

4. An electric steering column apparatus according to claim 3, wherein said electric tilt actuator and said electric telescopic actuator are composed of the same parts, respectively.

5. An electric steering column apparatus according to claim 3, characterized in that:

said electric actuator has an electric motor held by the main body of the actuator and a rod drive mechanism; and

said rod drive mechanism has a gear shaft comprised of a driven gear portion to be driven by a driving gear on the electric motor side and a shaft portion to be rotatably held by said actuator main body through bearings.

6. An electric steering column apparatus according to claim 3, wherein a first deformation portion protruding from the inner diameter of said bearing is formed on the

outer peripheral surface of said shaft portion.

7. An electric steering column apparatus according to claim 3, wherein a second deformation portion to be brought into contact with a side of the inner race of said bearing is formed on a side of said driven gear.

8. An electric steering column apparatus according to claim 3, further comprising an actuator rod wherein a female screw is formed on the axis of said gear shaft, a male screw for engaging said actuator with said female screw, and a lubricant oil retaining groove is formed on said female screw.

9. An electric steering column apparatus according to claim 3, wherein said driven gear portion is comprised of a gear base, a ring gear to be fitted on said gear base, and an elastic member to be interposed between said gear base and said ring gear.

10. An electric steering column apparatus which comprise a steering shaft having a steering wheel at the rear end thereof, a steering column for rotatably supporting the steering shaft and capable of tilt movement and telescopic movement to change the tilt position and the telescopic position of the steering wheel, and a tilt position and telescopic position adjusting mechanism by

which the tilt position as well as the telescopic position of the steering column may be adjusted, being characterized in the provision of an electric tilt adjusting mechanism for adjusting the tilt position of the steering column and an electric telescopic position adjusting mechanism for adjusting the telescopic position of the steering column, said electric tilt position adjusting mechanism and said electric telescopic position adjustment mechanism are separate and independent from each other.

11. An automatic steering apparatus for slidably fitting the inner column member of a steering column in the outer column member to extend or contract a rod of a drive portion, so as to move the inner column member in the back and forth direction of the car with respect to the outer column member to automatically adjust the length of the steering column in the axial direction thereof or to couple the inner column member to the car body or an upper column by means of the rod of the drive portion to automatically adjust an angle of inclination of the column, which steering apparatus comprising:

a bracket on the inner column member side to coupled to the rod of said drive portion;

an auxiliary member attached to the inner side of said inner column member in advance; and

a bracket main body to be assembled into this

auxiliary member through an opening of this inner column member.

12. An automatic tilt steering apparatus for automatically moving a steering column in an inclined manner to adjust an angle of inclination of a steering wheel, characterized in that:

a tilt center is provided at the lower end of the steering column in a front part of the car so that the steering column is integrally moved in an inclined manner, while a universal joint is provided at said lower end in the front part of the car so that the steering shaft is also moved in an inclined manner correspondingly to this tilt center;

a rod to be extended or contracted by a drive portion is engaged with a tilt rocking member rockably provided on the car body through a bracket, while a slide frame portion for sliding a sliding piece protruding from said steering column is provided on this tilt rocking member; and

said rod of the drive portion is extended or contracted with said arrangement and, when said tilt rocking member is rocked, said sliding piece is caused to rock, while sliding inside the slide frame portion, together with said steering column so as to move this steering column in an inclined manner.